

**WPX Energy Inc.- Various Well Sites  
Partial Compliance Evaluation (PCE)  
On-Site Clean Air Act (CAA) Inspections**

**Inspection Date:** October 8, 2019

**Inspection Report Date:** October 29, 2019

**EPA Representatives:** Alexis North

**Tribal Representatives:** Bird Lockwood  
Sal Beston

**Company Representatives:** None onsite during inspection.

**Company Mailing Address:** Bob King  
10471 One A Street SW  
Killdeer, ND 58640

**Inspection Report Prepared By:** Alexis North

**Inspection Report Reviewed By:** Scott Patefield

**Applicable Rules:** Fort Berthold Indian Reservation (Mandan, Hidatsa and Arikara Nation), North Dakota (Fort Berthold FIP)

**Compliance Assistance**

None

**Enforcement History**

No Clean Air Act enforcement cases taken in the last five years.

**Area of Concern**

The EPA detected unpermitted emissions from the closed vent systems of the following well pads, see Table 1 below for more details regarding location and identification of each pad and Tables 2 & 3 for inspection details for each pad:

- Dora Smith Pad (8HC, 8HY, 8HD)
- Van Hook
- Edward Flies Away Pad (7-8-9HC, 7-8-9HY, 7-8-9HB, 7-8-9HZ)
- FBIR/Olson Pad (FBIR 13-24HZ, HD, HC & Olson 12-1HD, HY, HC, HX)
- Olive Mae Pad (7-8-9HW, HX, HA)
- Glen Fox Pad (13-24HX, HA, HW)
- Adam Good Bear (15-22H, 22HX, 22HW) & State of ND (10-3HW, 3HA) 5 Well Pad

**General Source Information**

An unannounced inspection campaign was conducted on October 8, 2019 at multiple WPX Facilities. Inspectors scanned the following WPX Energy Inc. (WPX) well sites' crude and/or water storage tanks and flares onsite for any detectable emissions using an optical gas imaging (OGI) camera. Specifically,

inspectors scanned storage tanks for natural gas emissions per 40 C.F.R. § 49.4165(b)(1), (2) & (3) and utility flares per 40 C.F.R. § 49.4165(c).

The EPA evaluated the following WPX well sites on the Fort Berthold Indian Reservation using an OGI camera on October 8, 2019. The well information located in the tables below is from the North Dakota Industrial Commission (NDIC) well index located online at <https://www.dmr.nd.gov/oilgas/>.

The EPA did not contact WPX following the inspections.

Table 1 lists well pad specifics for each inspection including NDIC identification numbers, latitude/longitude location as well as entry/exit details.

Table 1: List of Facilities Inspected October 8, 2019

Well Name	NDIC #	Latitude	Longitude	Date	Time In	Time Out
Mary R Smith Pad (8H, 8HW, 8HX)	19377, 22108, 22109	47.84688	-102.48776	10/8/2019	9:50am	9:57am
Dora Smith Pad (8HC, 8HY, 8HD)	22117, 22118, 22119	47.84622	-102.47927	10/8/2019	9:59am	10:16am
Van Hook	25321	47.83414	-102.45159	10/8/2019	11:26am	11:35am
Edward Flies Away Pad (7-8-9HC, 7-8-9HY, 7-8-9HB, 7-8-9HZ)	28134, 28135, 28136, 28137	47.82437	-102.38685	10/8/2019	11:46am	11:56am
FBIR/Olson Pad (FBIR 13-24HZ, HD, HC & Olson 12-1HD, HY, HC, HX)	25010, 25011, 25012, 25006, 25007, 25008, 25009)	47.81784	-102.40151	10/8/2019	11:59am	12:10pm
Olive Mae Pad (7-8-9HW, HX, HA)	29443, 29613, 29614	47.83185	-102.38728	10/8/2019	12:18pm	12:25pm
Glen Fox Pad (13-24HX, HA, HW)	27270, 27271, 27272	47.82102	-102.40176	10/8/2019	12:38pm	12:47pm
George Evans (11-2HD, HC, HZ & 14-23HD, HC, HZ)	22211, 12, 13, 14, 15, 16	47.82014	-102.41384	10/8/2019	12:50pm	12:58pm
Adam Good Bear (15-22HC, 22HY, 22HD) & State of ND (10-3HY, 3HC, 3HZ) 6 Well Pad	24461, 62, 63, 22071, 72, 73	47.8201	-102.4337	10/8/2019	1:00pm	1:08pm
Adam Good Bear (15-22H, 22HX, 22HW) & State of ND (10-3HW, 3HA) 5 Well Pad	19515, 23318, 23317, 25628, 25629	47.81672	-102.44625	10/8/2019	1:10pm	1:20pm

Tables 2 and 3 at the end of this report includes the inspections details. Table 2 includes well head counts and storage details. Table 3 contains control device and audio, visual, or olfactory (AVO) details. Each well pad inspection followed the approach below:

1. Park on the wellpad.
2. Make notations on the site operation including the number of each major type of site process equipment present (e.g., total number of tanks, number of oil tanks, number of water tanks, number of tank emission control devices).
3. Note any AVO indications of emissions from the tanks, closed vent system, and control devices.
4. Survey the site operations in infrared modes (auto, manual, and/or high-sensitivity modes), looking for emissions escaping the tank, closed vent system, and control devices.

### **Fort Berthold FIP Applicability**

Based on drilling information reported to the NDIC well index by WPX, the facilities listed in Tables 1 were completed after the August 12, 2007 applicability date (per 40 C.F.R. § 49.4161) and are producing from the Bakken Pool (per 40 C.F.R. § 49.4163(a)(1)) and are thus subject to the Fort Berthold FIP.

#### Closed Vent System Equipment Requirements [§49.4165(b)]

Per 49.4165(b)(1), “Each closed-vent system must route all produced natural gas and natural gas emissions from production and storage operations to the natural gas sales pipeline or the control devices...”. The EPA, using an OGI camera, detected natural gas emissions from production and storage tanks at 7 of the 10 well pads evaluated.

#### Utility Flare Requirements [§49.4165(c)(6)(vi)]

Per 49.4165(c)(6)(vi), “The owner or operators must ensure that each enclosed combustor and utility flare is maintained in a leak-free condition.” The EPA, using an OGI camera, detected no natural gas emissions from utility flares at the 10 well pads evaluated.

#### **NSPS OOOO or OOOOa Applicability**

In the event of NSPS OOOO or OOOOa applicability at the inspected facilities, the observations made by EPA may be used to assess compliance.

Table 2: Inspection Details: Well Head Count and Storage Tanks

Well Name	# Well Heads (WH)	# WH Operating ?	# Total Storage Tanks	Vapor Recovery Tower?	CVS IR?	File ID	Tank Thief IR?	File ID
Mary R Smith Pad (8H, 8HW, 8HX)	3	2	9	N	N		N	
Dora Smith Pad (8HC, 8HY, 8HD)	3	3	6	N	N		Y- Heavy	MOV_0012
Van Hook	2	2	5	N	N		Y	IR_0030, MOV_0031, 0032
Edward Flies Away Pad (7-8-9HC, 7-8-9HY, 7-8-9HB, 7-8-9HZ)	4	3	14	N	N		Y- Slight	MOV_0035
FBIR/Olson Pad (FBIR 13-24HZ, HD, HC & Olson 12-1HD, HY, HC, HX)	7	6	21	N	Y- Seperator	MOV_0042	Y- Slight	MOV_0041
Olive Mae Pad (7-8-9HW, HX, HA)	3	3	6	N	N		Y	MOV_0044, 0045
Glen Fox Pad (13-24HX, HA, HW)	3	3	9	N	N		Y	MOV_0049
George Evans (11-2HD, HC, HZ & 14-23HD, HC, HZ)	6	4	19	N	Y	MOV_0052	N	
Adam Good Bear (15-22HC, 22HY, 22HD) & State of ND (10-3HY,3HC, 3HZ) 6 Well Pad	6	6	20	N	N		N	
Adam Good Bear (15-22H, 22HX, 22HW) & State of ND (10-3HW, 3HA) 5 Well Pad	3	3	26	N	N		Y- Slight	HSM only, no movie

Table 3: Inspection Details: Control Devices and AVO

Well Name	Combustion Device (CD) Type	CD Count	Visible flame CD?	UBHC ?	CD IR?	File ID	Smoke from CD?	AVO	Notes
Mary R Smith Pad (8H, 8HW, 8HX)	Steffes	1	Yes	N					
Dora Smith Pad (8HC, 8HY, 8HD)	Steffes	1	Yes	N					Smelled VOCs upon arrival
Van Hook	Steffes	1	Yes	N		IR_0033			
Edward Flies Away Pad (7-8-9HC, 7-8-9HY, 7-8-9HB, 7-8-9HZ)	Steffes	3	Yes	N		IR_0036, DC_0038, 0039	Y		
FBIR/Olson Pad (FBIR 13-24HZ, HD, HC & Olson 12-1HD, HY, HC, HX)	Steffes	2	Yes	N					Leak from separator MOV_0042, 1 of 2 Steffes operating
Olive Mae Pad (7-8-9HW, HX, HA)	Steffes	2	Yes	N		IR_0046			1 of 2 Steffes operating
Glen Fox Pad (13-24HX, HA, HW)	Steffes	1	Yes	N					
George Evans (11-2HD, HC, HZ & 14-23HD, HC, HZ)	Steffes	1	Yes	N					Is there a backup pit flare? DC_0053
Adam Good Bear (15-22HC, 22HY, 22HD) & State of ND (10-3HY, 3HC, 3HZ) 6 Well Pad	Steffes	1	Yes	N					Flooded wellsite DC_0055
Adam Good Bear (15-22H, 22HX, 22HW) & State of ND (10-3HW, 3HA) 5 Well Pad	Steffes	2	Yes	N		IR_0058			Is there a backup pit flare? DC_0059

\*UBHC = unburned hydrocarbons